

Docket No.: 10884-00023-US (PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Arthur D. Ballard et al.

Application No.: 10/824957

Filed: April 14, 2004

For: DELIVERY SYSTEMS OF

HOMOGENEOUS, THERMOREVERSIBLE

ALGINATE FILMS

Confirmation No.: 7461

Art Unit: N/A

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

Application No.: 10/824957 Docket No.: 10884-00023-US

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 03-2775, under Order No. 10884-00023-US. A duplicate copy of this paper is enclosed.

Dated: November 8, 5005

Respectfully submitted,

Liza D. Hohenschutz

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Attorney Docket No.: 10884-00023-US

Application No. (if known): 10/824957

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Complete if Known				
Application Number 10/824957-Conf. #7461				
Filing Date	April 14, 2004			
First Named Inventor	Arthur D. Ballard			
Art Unit	N/A			
Examiner Name	Not Yet Assigned			
Attorney Docket Number	10884-00023-US			

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/E.S.C	AA	2,802,000	8/6/1957	Caldwell et al.	
š	AB	2,813,093	11/12/1957	Caldwell et al.	
-	AC	2,825,727	3/4/1958	C. G. Caldwell	
	AD	2,876,217	3/3/1959	E. F. Paschall	
	AE	3,058,827	10/16/1962	J. L. Graham	
8	AF	3,094,517	6/18/1963	N. F. Stanley	
	AG	3,176,003	3/30/1965	D. J. Stancioff	
	AH	3,329,509	7/4/1967	A. Julius	
	Al	3,378,546	4/16/1968	T. Tsuzuki	
	AJ	3,499,962	3/10/1970	Warzburg et al.	
	AK	3,505,110	4/7/1970	Kesler et al.	
	AL	3.607394	9/21/1971	F. J. Germino et al.	
	AM	3,865,603	2/11/1975	Szymanski et al.	
	AN	4,009,291	2/22/1977	Mitchell et al.	
	AO	4,026,986	5/31/1977	Christen et al.	
	AP	4,129,134	12/12/1978	Hind et al.	
	AQ	4,231,803	11/4/1980	Bovier et al.	1
	AR	4,276,320	6/30/1981	A. Moirano	
	AS	4,600,439	7/15/1986	Schneider et al.	
	AT	4,615,897	10/7/1986	Brown et al.	
	AU	4,626,288	12/2/1986	Trzasko et al.	
	AV	4,632,848	12/30/1986	Gassett et al.	
	AW	4,643,894	2/17/1987	S. C. Porter et al.	
	AX	4,725,441	2/16/1988	S. C. Porter	
	AY	4,738,724	4/19/1988	Wittwer et al	
-	AZ	4,795,642	1/3/1989	Cohen et al.	
		4,828,841	5/9/1989	S. C. Porter	
		4,935,243	6/19/1990	Borkan et al.	
		5,089,307	2/18/1992	H. Ninomiya et al.	
		5,146,730	9/15/1992	Sadek et al.	
		5,224,989	7/6/1993	Eva Likarova	
		5,334,640	8/2/1994	Desai et al.	
		5,342,626	8/30/1994	P. E. Winston, Jr. et al.	
		5,451,673	9/19/1995	Fishman et al.	
		5,484,598	1/16/1996	Schurig et al.	
		5,549,983	8/27/1996	J. Yamanis	
		5,525,368	6/11/1996	Rha et al.	
		5,550,178	8/27/1996	Desai et al.	
		5,554,385	9/10/1996	N. Stroud	
		5,587,412	12/24/1996	G. Bochers et al.	
		5,620,757	4/15/1997	H. Ninomiya et al.	
		5,646,206	7/8/1997	D. R. Coffin et al.	
		5,656,294	8/12/1997	Friend et al.	
*		5,672,699	9/30/1997	R. L. Billmers et al.	
		5,726,008	3/10/1998	J. E. Maskasky	

Examiner	/Elizabeth S. Capan/	Date	02/01/2008
Signature	/Enzadotti O. Oapaii/	Considered	

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Subs	Substitute for form 1449A/B/PTO			Complete if Known		
3003				Application Number	10/824957-Conf. #7461	
IN	IFORMATIOI	N DI	SCLOSURE	Filing Date	April 14, 2004	
S	STATEMENT BY APPLICANT			First Named Inventor	Arthur D. Ballard	
	.,			Art Unit	N/A	
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Sheet	2	of	4	Attorney Docket Number	10884-00023-US	

· · ·					
E.S	.C.	ABT	5,804,243	9/8/1998	Loh et al.
		ABU	5,811,388	9/22/1998	Friend et al.
		ABV	5,817,323	10/6/1998	Hutchinson et al.
		ABW	5,932,639	8/3/1999	Eden et al.
		ABX	5,976,586	11/2/1999	L. Feller
		ABY	6,030,641	2/29/2000	Yamashita et al.
		ABZ	6,063,915	5/16/2000	Hansen et al.
		ACA	6,066,368	5/23/2000	Billmers et al.
		ACB	6,143,324	11/7/2000	Michaud et al.
		ACC	6,146,570	11/14/2000	A. J. Stern
		ACD	6,210,709	4/3/2001	Laba et al.
		ACE	6,214,376	4/10/2001	A. Gennadios
		ACF	6,331,205	12/18/2001	L. Paris
		ACG	6,375,981	4/23/2002	G. M. Gilleland et al.
		ACH	6,387,354	5/14/2002	Bixler et al.
		ACI	6,479,649	11/12/2002	Tsai et al.
	1		6,517,865	2/11/2003	Cade et al.
		ACK	6,528,088	3/4/2003	Gilleland et al.
		ACL	6,607,748	8/19/2003	V. Lenaerts et al.
		ACM	6,649,188	11/18/2003	Gilleland et al.
			6,790,495	9/14/2004	Tomka et al.
			2002/0081331	6/27/2002	K. E. Tanner et al.
			2002/0142031	10/3/2002	G. M. Gilleland et al.
		ACQ	2003/0138482	7/24/2003	L. G. Fonkwe et al.
		ACR	2004/0087669	5/6/2004	S. Hausmanns et al.
I	1	ACS	2005/0069579	3/31/2005	R. Kamaguchi et al.
\	1		2005/0070703	3/31/2005	R. Muller et al.
/E.S	.CI,	ACU	2005/0163833	7/28/2005	R. Muller

			FOREI	GN PATENT	DOCUMENTS		
Examiner		Cite		Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	
	Initials*		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	
/E.S	3 C	₿А	EP 0 169 319	1/29/1986	Berwind Pharmaceutical		
	J . J	Γ΄			Services, Inc.		
		BB	EP 0 400 484	12/5/1990	Mitsubishi Rayon Co., LTD		
		ВС	EP 0 408 503	1/16/1991	Warner-Lambert Company		
		BD	EP 0 409 781	1/23/1991	Warner-Lambert Company		
		BE	EP 0 409 782	1/23/1991	Warner-Lambert Company		
		BF	EP 0 409 788	1/23/1991	Warner-Lambert Company		\Box
		BG	EP 0 471 558	2/19/1992	Unilever NV		
		вн	EP 0 547 551	6/23/1993	National Search and Chemical		
					Investment Holding Corporation		
		ВІ	EP 0 606 486	7/20/1994	Teijin Limited		
		BJ	EP 0 622 408	11/2/1994	CP Kelco ApS		
1		ВК	EP 0 633 896	1/18/1995	National Search and Chemical		
NA.	F				Investment Holding Corporation		
/E.8	30	BL	EP 0 761 691	3/12/1997	National Search and Chemical		
/ L C	J.U	ľ			Investment Holding Corporation		

Examiner	/Elizabeth S. Capan/	Date	02/01/2008
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		ВМ	JP 5-4914	1/14/1993	Asahi Chemical Ind; Fuji	
T	00000000000	000000000000000000000000000000000000000	900000000000000000000000000000000000000	000000000000000000000000000000000000000	Capsule KK	
_	***********	- BN	JP 7-196478	8/1/1005	Sugii Hajime	
E	E.S.(BO	WO 94/25493	11/10/1994	The United States of America	
Γ	ĕ	BP	WO 97/49762	12/31/1997	Oy Polymer Corex Kuopio Ltd.	
	000	BQ	WO 99/07347	2/18/1999	Paris, Laurence	
r	- 8	BR	WO 00/10538	3/2/2000	Banner Pharmacaps, Inc.	\Box
Г	$\nabla I J$	BS	WO 00/18835	4/6/2000	Warner-Lambert Company	
Г	*	BT	WO 01/37817		Greither, Peter	
Æ	E.S.C	Ĵ.∤BU	WO 01/91721	12/6/2001	A.E. Staley Manufacturing Co.]

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
/E.S.C	CA	de Vries J., "Interaction of carrageenan with other ingredients in dairy dessert gels", Gums and stabilisers for the food industry 11: proceedings of the 11th conference, Wrexham, vol. 11 (2002), no, pages 201-210, July 2001	
000000000	СВ	R. Falshaw et al., "Structure and performance of commercial K-2 carrageenan extracts", Food Hydrocolloids, vol. 17, pages 129-139, 2003	
999	CC	FMC BioPolymer, "Carrageenan Matrices for Entrapment", Issue No. 1, April 1993	
0000	CD	Henry J. Witt, "Carrageenan Nature's Most Versatile Hydrocolloid", pages 347-360, 1985	
000000000	CE	Glicksman, M., "Gum Technology in the Food Industry", Academic Press, pages 213-228, 1969	
0000	CD	C. J. Lawson et al., "Carrageenans", J.C.S. Perkin I, pages 2177-2182, 1973	
		H. J. Bixler, "Recent developments in manufacturing and marketing carrageenan", Hydrobiologia, pages 35-57, 1996	
000000000	CF	M. C. Matulewicz et al., "Carrageenan Systems from Tetrasporic or Cystocarpic Stages of Gigartina Skottsbergii", Phytochemistry, vol. 28, pages 2937-2941, 1989	
000000000000000000000000000000000000000	CG	M. C. Matulewicz et al., "Methylation Analysis of Carrageenans from Tetrasporic and Cystocarpic Stages of Gigartina Skottsbergii", Phytochemistry, vol. 29, no. 11, pages 3407-3410, 1990	
00000000	СН	C. Rochas et al., "Relation Between the Molecular Strcture and Mechanical Properties of Carrageenan Gels", "Carbohydrate Polymers, vol. 10, pages 115-127, 1989	
000000000	CI	Stancioff, D. J. and Stanley, N. F., "Infrared and Chemical Studies on Algal Polysaccharides", Prod. Intl. Seaweed Symp. 6, pages 595-609, 1969	
Carrageenase and ¹³ C N.M.R., Xth International Seaweed Symposium, Walter de Gruyte		Bellion, C. et al, "Analysis of Kappa-lota Hybrid Carrageenans with Kappa-Carrageenase, lota- Carrageenase and ¹³ C N.M.R., Xth International Seaweed Symposium, Walter de Gruyter & Co., Berlin-New York, pages 379-384, 1981	
	CK	Peats, S., "The Infrared Spectra of Carrageenans Extracted from Various Algae", Xth International Seaweed Symposium, Walter de Gruyter & Co., Berlin-New York, pages 495-502, 1981	
*	ÇL	JP 5-4914 English language Abstract (espace.net)	
7E.S.C	-ĆM	JP 7-196478 English language Abstract (European Patent Office)	

Examiner	/Elizabeth S. Capan/	Date	02/01/2008
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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